South Carolina Geographic Information Systems

State Outreach Planning Meeting

Monday, October 20th, 2008

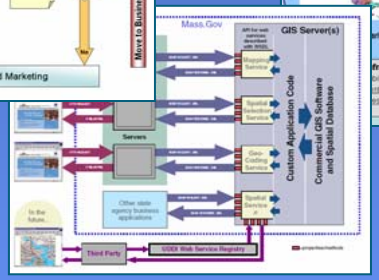
Columbia, SC

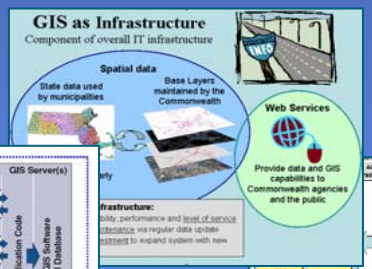
Applied Geographics, Inc.
Environmental and Geographic Information Systems

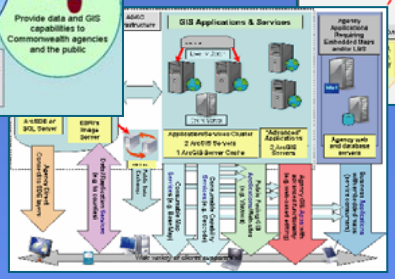
Meeting Facilitator

Rich Grady

President, AppGeo







(617) 447-2455

rgrady@appgeo.com

The Planning Process Matters!

"Plans are nothing; planning is everything"

Dwight D. Eisenhower

"Plans are of little importance, but planning is essential"

Winston Churchill

http://www.whitehouse.gov/history/presidents/de34.html

http://en.wikipedia.org/wiki/Image:Winston_Churchill.jpg

- Establish enduring relationships
- Recognize that planning is an ongoing activity
  - Recalibrate plans over time

Agenda

Welcoming Remarks

PART ONE:

Overview and Background

- The national context: National Spatial Data Infrastructure (NSDI) and Fifty States Initiative
- Description of the current State Outreach project
  - Regional Stakeholder Workshops
  - Strategic Plan Components
  - Roles & Responsibilities

Networking Break

PART TWO:

- Lessons-Learned from Other States (and Questions for You)
- Interactive Discussion on State Outreach to Regional Stakeholders
  - Identification of regional issues
  - Prioritization among identified issues
  - Planning the Regional Stakeholder Workshops

The National Spatial Data Infrastructure (NSDI)
Relevant Federal Initiatives

- **The National Map (TNM)**
  - Compilation and integration of consistent, high-quality nationwide data sets from the best sources for 7 Framework Layers (and Structures)
  - Are your data sets part of it?
- **Geospatial One-Stop (GOS)**
  - Portal for access to nationwide data and metadata
  - A pointer to the best source (or is it?)
- **50 States Initiative**
  - Effort to catalyze creation of NSDI
  - Including the CAP grant funding this project and planning guidance
  - Collaboration between:
    - National States Geospatial Information Council (NSGIC)
    - Federal Geographic Data Committee (FGDC)

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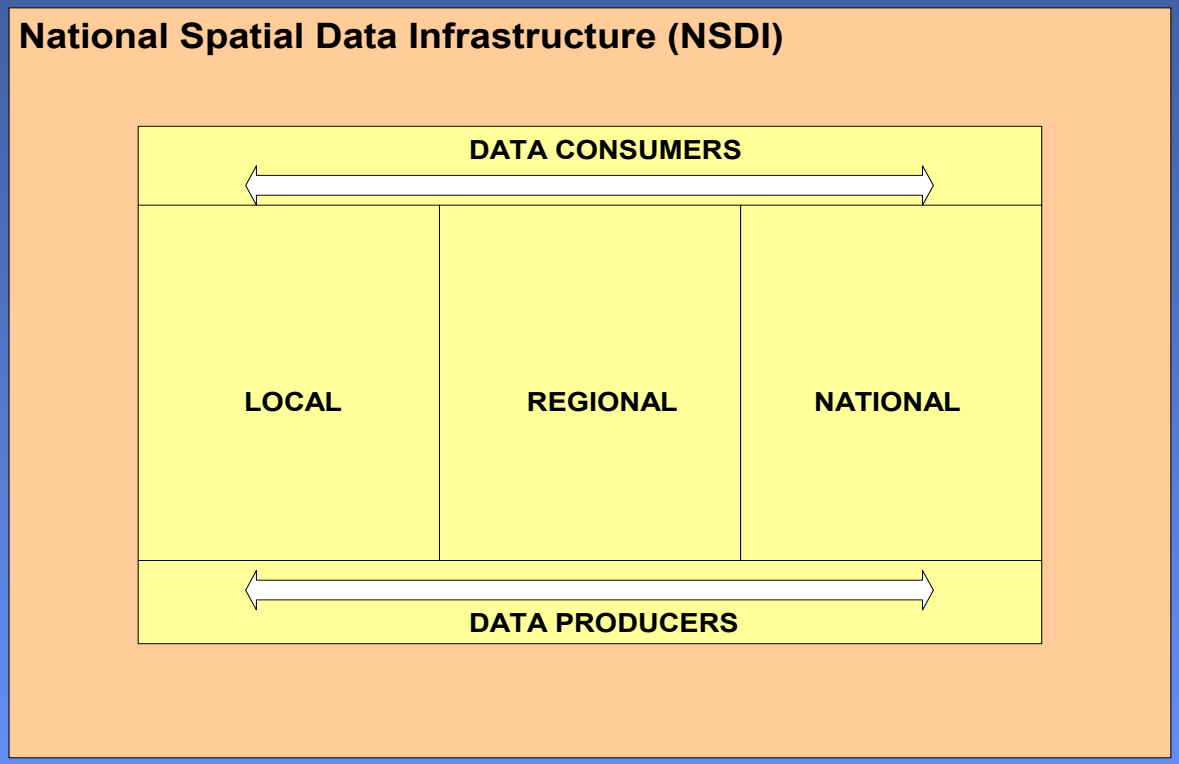
17S NS 7904
17S NS 7903
South Carolina
mySCMap-Contributors
National Atlas State Labels
National Atlas States
National Atlas County Labels 2001
National Atlas Counties
Urban Area Public Data Coverage
Urban Area View Only Data Coverage
Hydrography
National Atlas and NHD Streams
National Atlas and NHD Waterbodies
Imagery
SCDNR - DOQQ 2006 (CIR)
SCDNR - DOQQ 1999 (CIR)
SCDNR - DOQQ 1994 (CIR)
SCDNR - DRG 1:24,000 Scale
DOQQ Color Mosaicked Image
DOQQ Black and White Mosaicked Image (East)
LANDSAT7
Elevation
Accessibility
FOIA
Privacy
Policies and Notices

NSDI Goal: Cross-Governmental Data Sharing

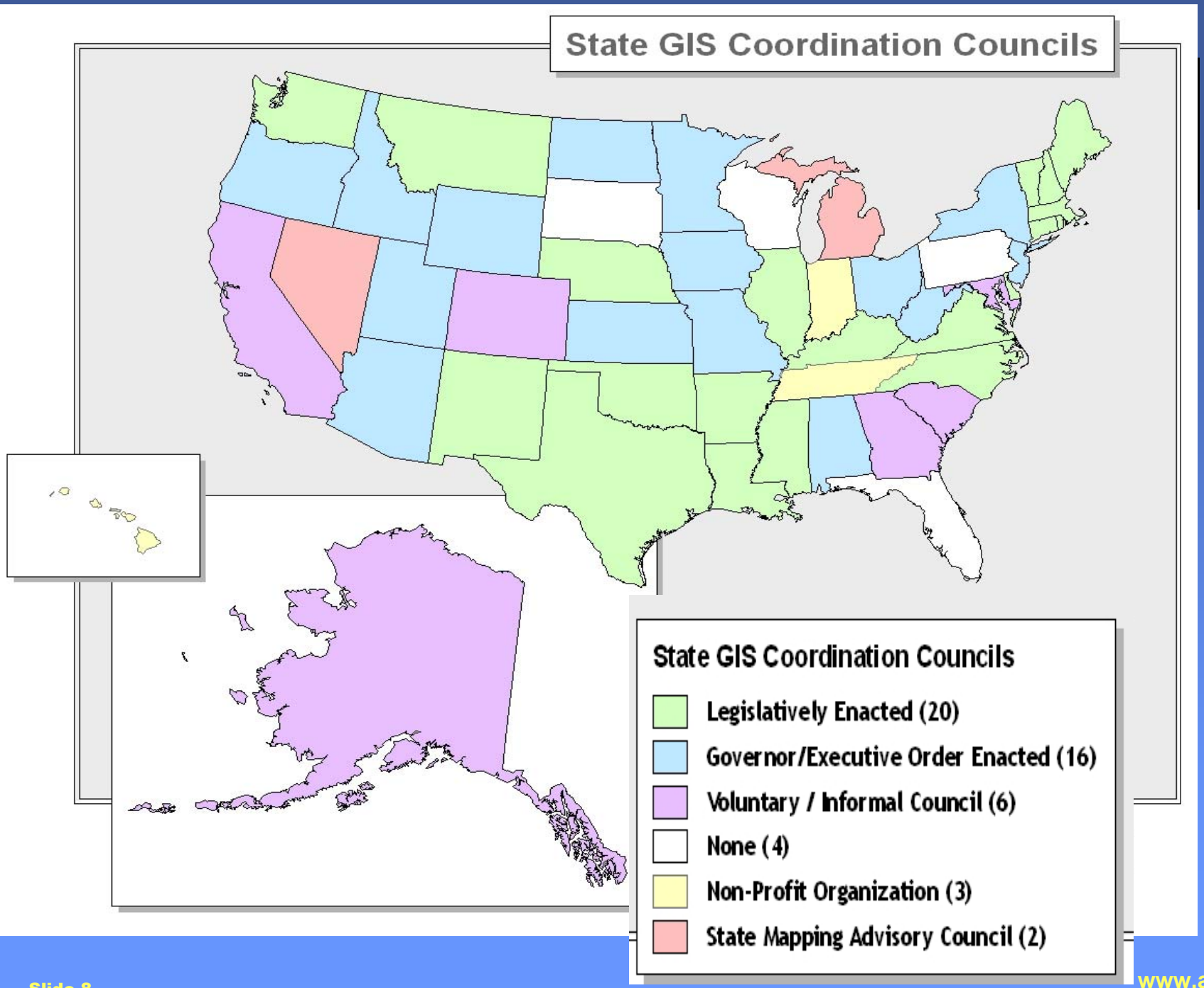


"Supply Chain" View

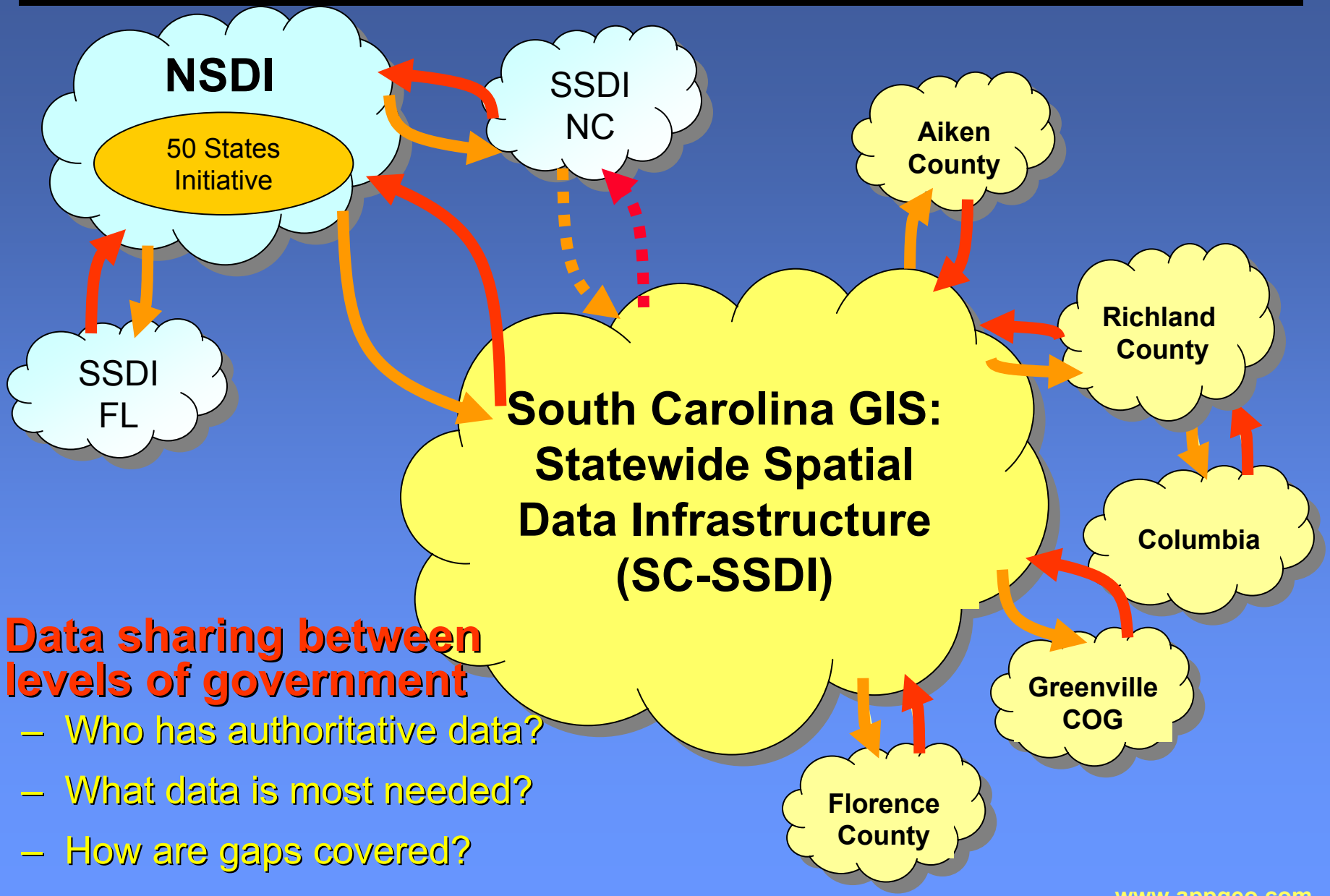
NSDI Framework Layers

1) Geodetic Control
2) Cadastral (parcels)
3) Political Boundaries
4) Hydrography
5) Imagery (orthos)
6) Elevation
7) Transportation (e.g., Roads, Air, Rail, Transit, Inland waterways, etc.)

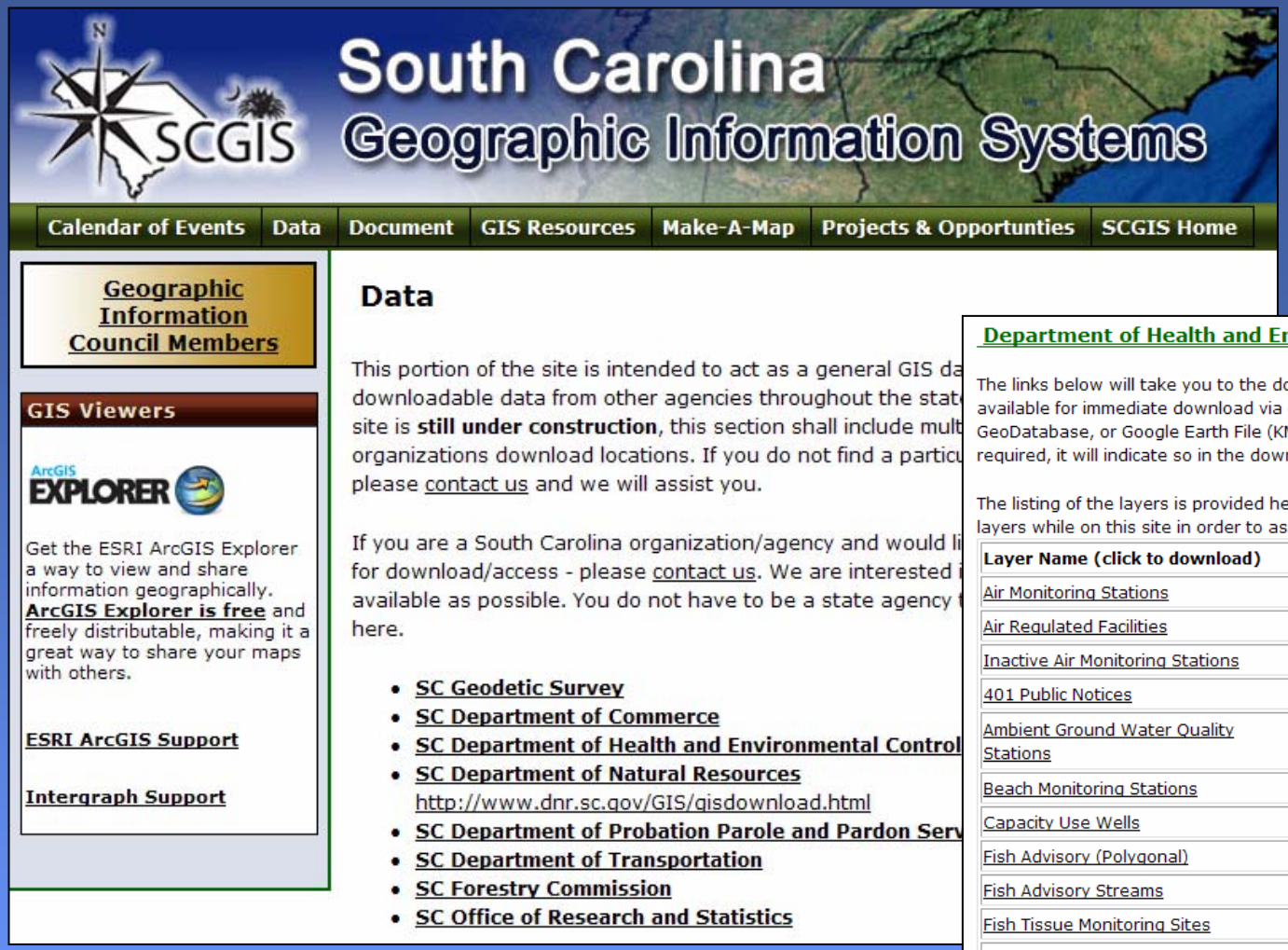
… *and Structures*


State GIS Coordination Councils
State GIS Coordination Councils
Legislatively Enacted (20)
Governor/Executive Order Enacted (16)
Voluntary / Informal Council (6)
None (4)
Non-Profit Organization (3)
State Mapping Advisory Council (2)

Statewide Spatial Data Infrastructures & NSDI



- **Data sharing between levels of government**
  - Who has authoritative data?
  - What data is most needed?
  - How are gaps covered?

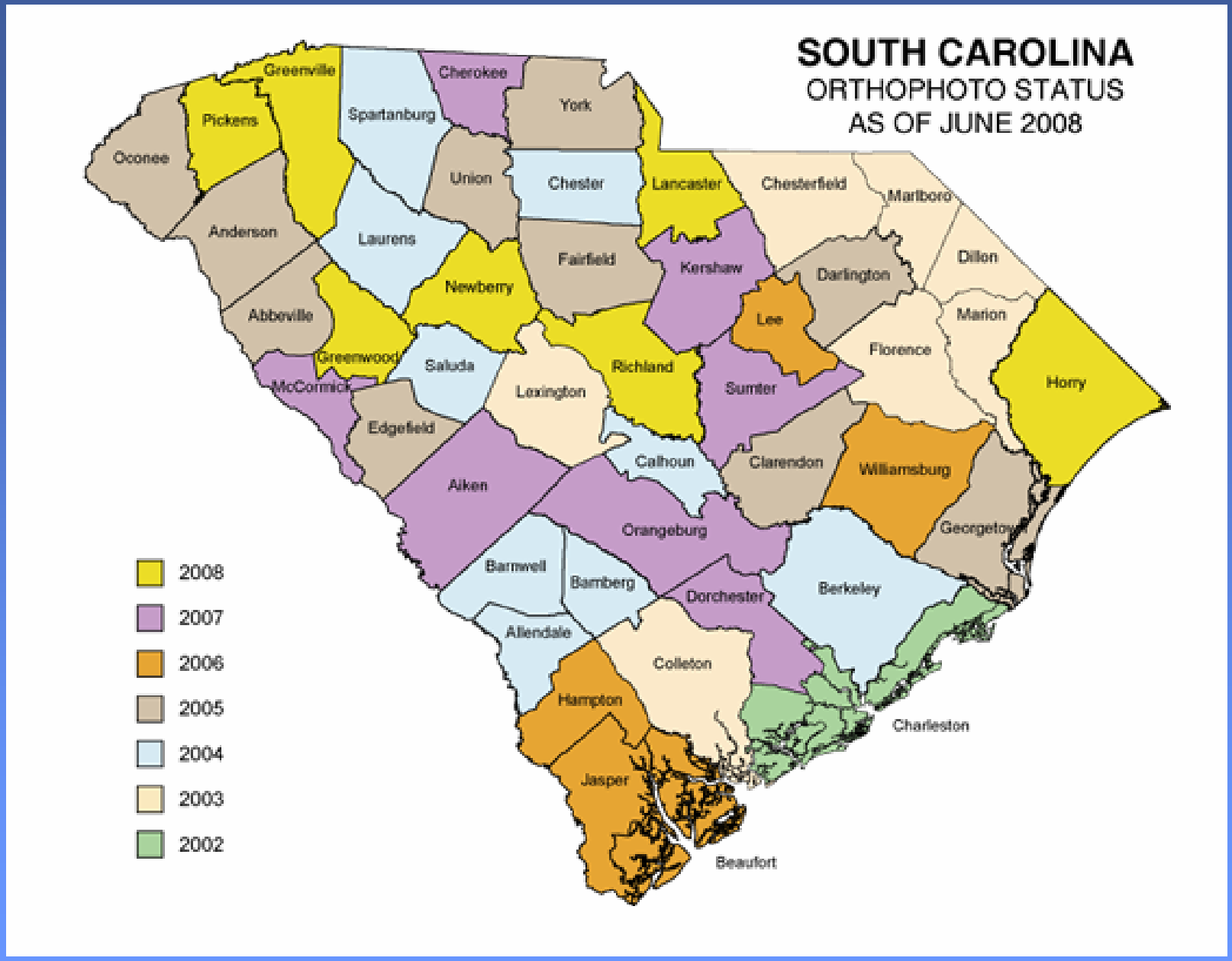


Department of Health and Environmental Control

The links below will take you to the download location for DHEC. Most of the layers are available for immediate download via one or more formats - ArcView Shapefiles, File GeoDatabase, or Google Earth File (KMZ). A few of the layers require FOI requests. If required, it will indicate so in the downloads section.

The listing of the layers is provided here to allow for text-based searches of available data layers while on this site in order to assist you with finding what you need.

Layer Name (click to download)	Data Source
Air Monitoring Stations	Bureau of Air Quality
Air Regulated Facilities	Bureau of Air Quality
Inactive Air Monitoring Stations	Bureau of Air Quality
401 Public Notices	Bureau of Water
Ambient Ground Water Quality Stations	Bureau of Water
Beach Monitoring Stations	Bureau of Water
Capacity Use Wells	Bureau of Water
Fish Advisory (Polygonal)	Bureau of Water
Fish Advisory Streams	Bureau of Water
Fish Tissue Monitoring Sites	Bureau of Water
Macroinvertebrate Stations	Bureau of Water
Modeled Stream Segments	Bureau of Water
National Pollutant Discharge Elimination System	Bureau of Water
Nationwide Water Permits	Bureau of Water
Navigable Lakes	Bureau of Water
Navigable Streams	Bureau of Water
Navigable Water Permits	Bureau of Water


SOUTH CAROLINA
ORTHOPHOTO STATUS
AS OF JUNE 2008
Greenville
Cherokee
Spartanburg
York
Pickens
Oconee
Union
Chester
Lancaster
Chesterfield
Marlboro
Anderson
Laurens
Fairfield
Kershaw
Darlington
Dillon
Newberry
Lee
Marion
Abbeville
Florence
Greenwood
Saluda
Richland
Horry
McCormick
Lexington
Sumter
Edgefield
Calhoun
Clarendon
Williamsburg
Aiken
Orangeburg
Georgetown
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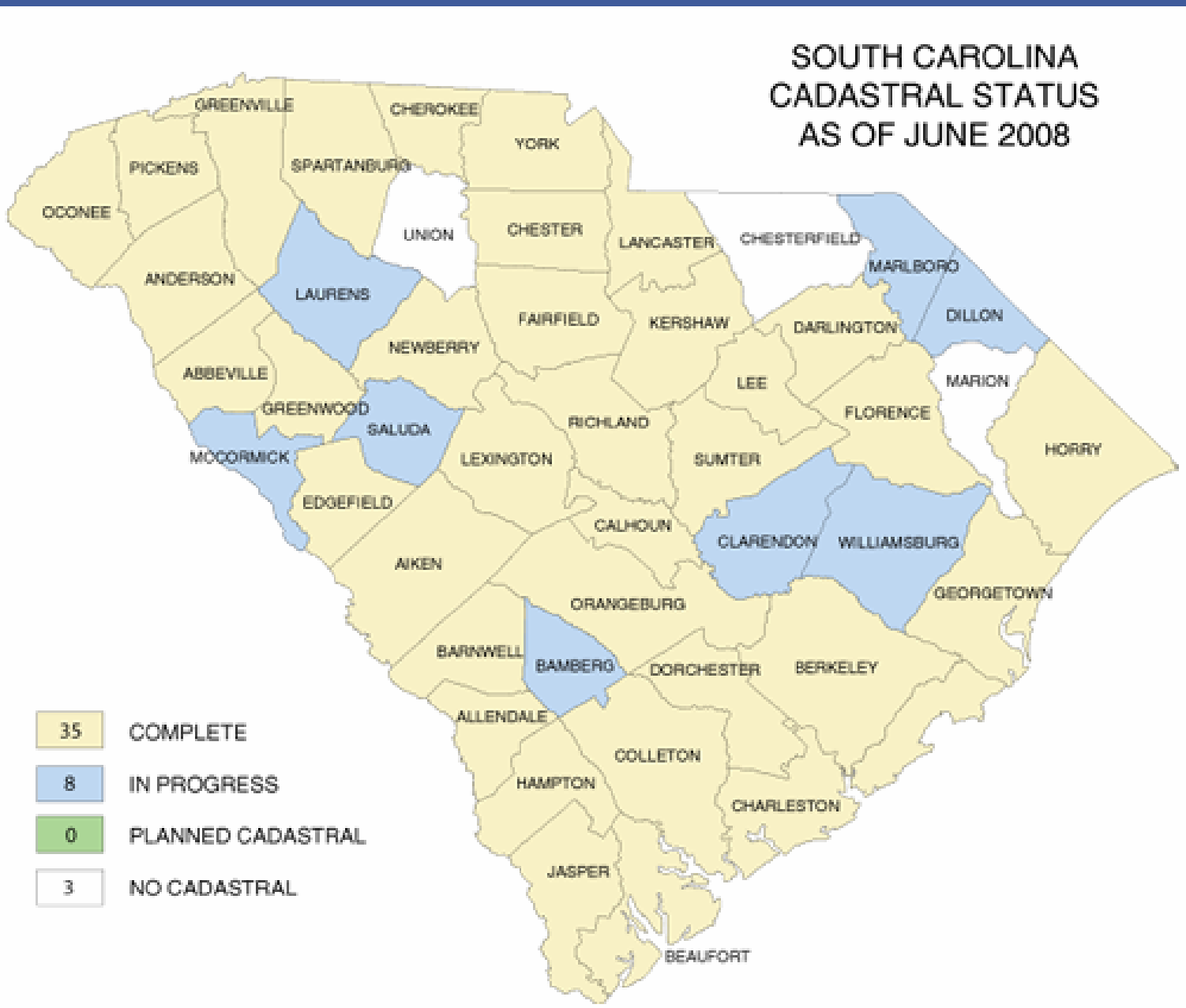
SOUTH CAROLINA
CADASTRAL STATUS
AS OF JUNE 2008
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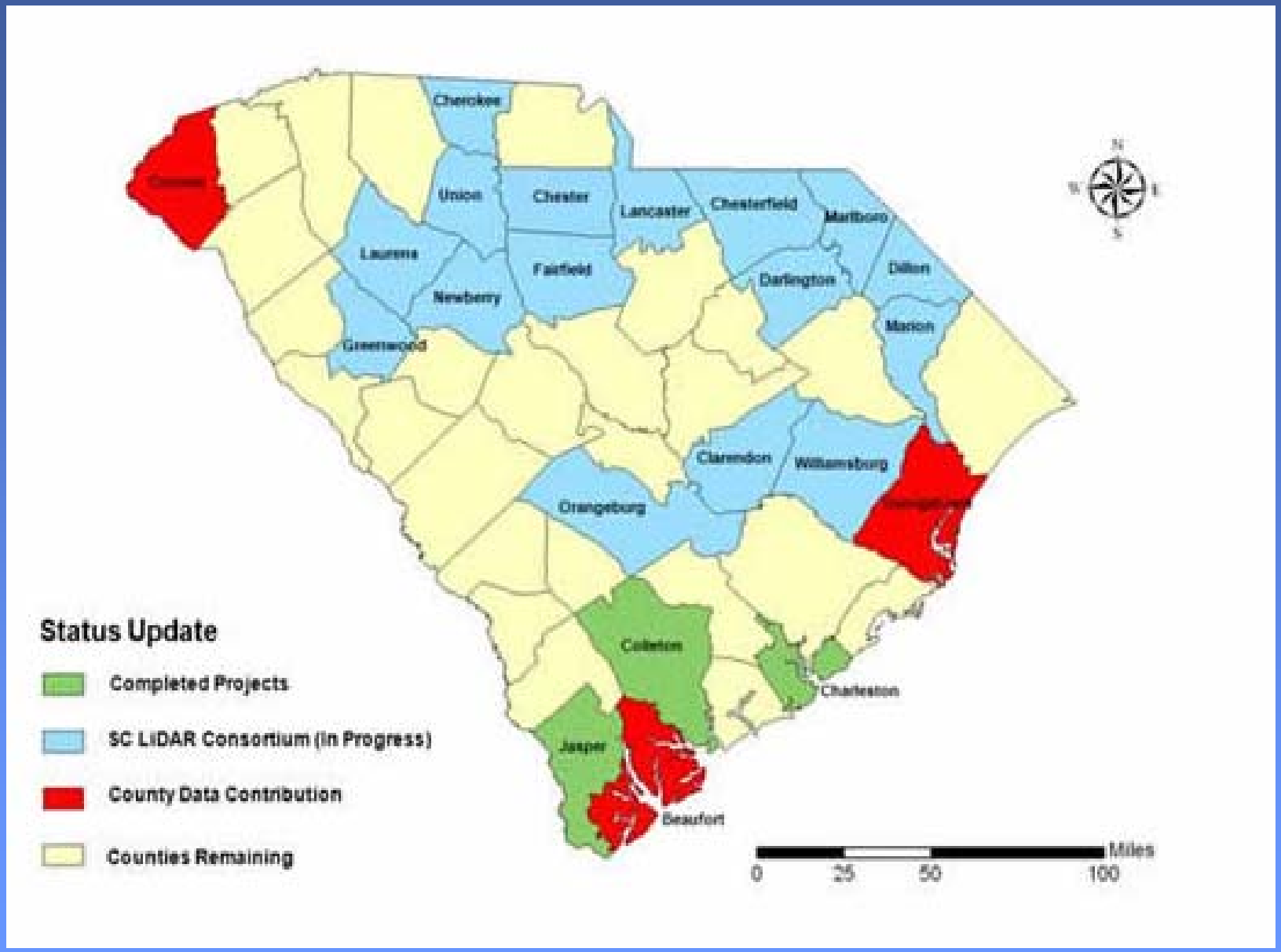
CHEROKEE
YORK
PICKENS
SPARTANBURG
OCONEE
UNION
CHESTER
LANCASTER
CHESTERFIELD
MARLBORO
ANDERSON
LAURENS
FAIRFIELD
KERSHAW
DARLINGTON
DILLON
NEWBERRY
ABBEVILLE
LEE
MARION
GREENWOOD
SALUDA
RICHLAND
FLORENCE
MCCORMICK
LEXINGTON
SUMTER
HORRY
EDGEFIELD
CALHOUN
CLARENDON
WILLIAMSBURG
AIKEN
ORANGEBURG
GEORGETOWN
BARNWELL
BAMBERG
DORCHESTER
BERKELEY
ALLENDALE
COLLETON
HAMPTON
CHARLESTON
JASPER
BEAUFORT
35
COMPLETE
8
IN PROGRESS
0
PLANNED CADASTRAL
3
NO CADASTRAL

Statewide LiDAR Project Status



Fifty States Initiative: *Nine (9) criteria of a successful statewide GIS program*

1. A full-time, paid coordinator position is designated and has the authority to implement the state's business and strategic plans
2. A clearly defined authority exists for statewide coordination of geospatial information technologies and data production
3. The statewide coordination office has a formal relationship with the state's Chief Information Officer (CIO)
4. A champion (politician, or executive decision-maker) is aware and involved in the process of geospatial coordination
5. The responsibilities for developing the National Spatial Data Infrastructure and a State Clearinghouse are assigned
6. The ability exists to work and coordinate with local governments, academia, and the private sector
7. The sustainable funding sources exist to meet project needs
8. GIS Coordinators have the authority to enter into contracts and become capable of receiving and expending funds
9. The Federal government works through the statewide coordinating authority

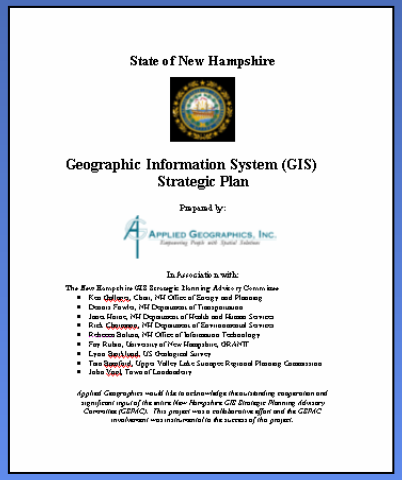
Fifty States Initiative & Advancing NSDI

- FGDC wants to create a National Spatial Data Infrastructure
- Jointly with NSGIC, FGDC came up with Nine Criteria for Success at the State-level
- State Spatial Data Infrastructure (SSDI's) are critical to success of NSDI and are intrinsically important to states!
- Strategic planning will aid process of establishing effective SSDIs
- FGDC will Support Strategic Planning via CAP grants
- In partnership with NSGIC they created strategic & business planning templates
  - "One size does not fit all..."
  - "But, the table of contents can be similar..."

The NSGIC Templates

The one-two punch of Strategic & Business Plans

- **One** Strategic Plan, potentially **many** Business Plans
- **Strategic Plan:** The "big picture" and overall context
  - **What** and **Why**
  - Vision & Goals
  - Strengths & Weaknesses
  - Opportunities & Threats

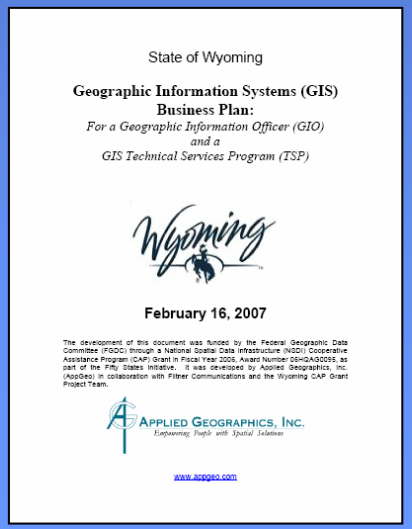

State of New Hampshire

Geographic Information System (GIS)
Strategic Plan

Prepared by:

Applied Geographics, Inc.

- **Business Plan(s)**
  - **How, When**, and **How Much**
  - Implementation details for achieving Strategic Goals
  - Presented as a business case
  - Typically come after approval of Strategic Plan


State of Wyoming

Geographic Information Systems (GIS)
Business Plan:
For a Geographic Information Officer (GIO)
and a
GIS Technical Services Program (TSP)

Wyoming

February 16, 2007

Applied Geographics, Inc.

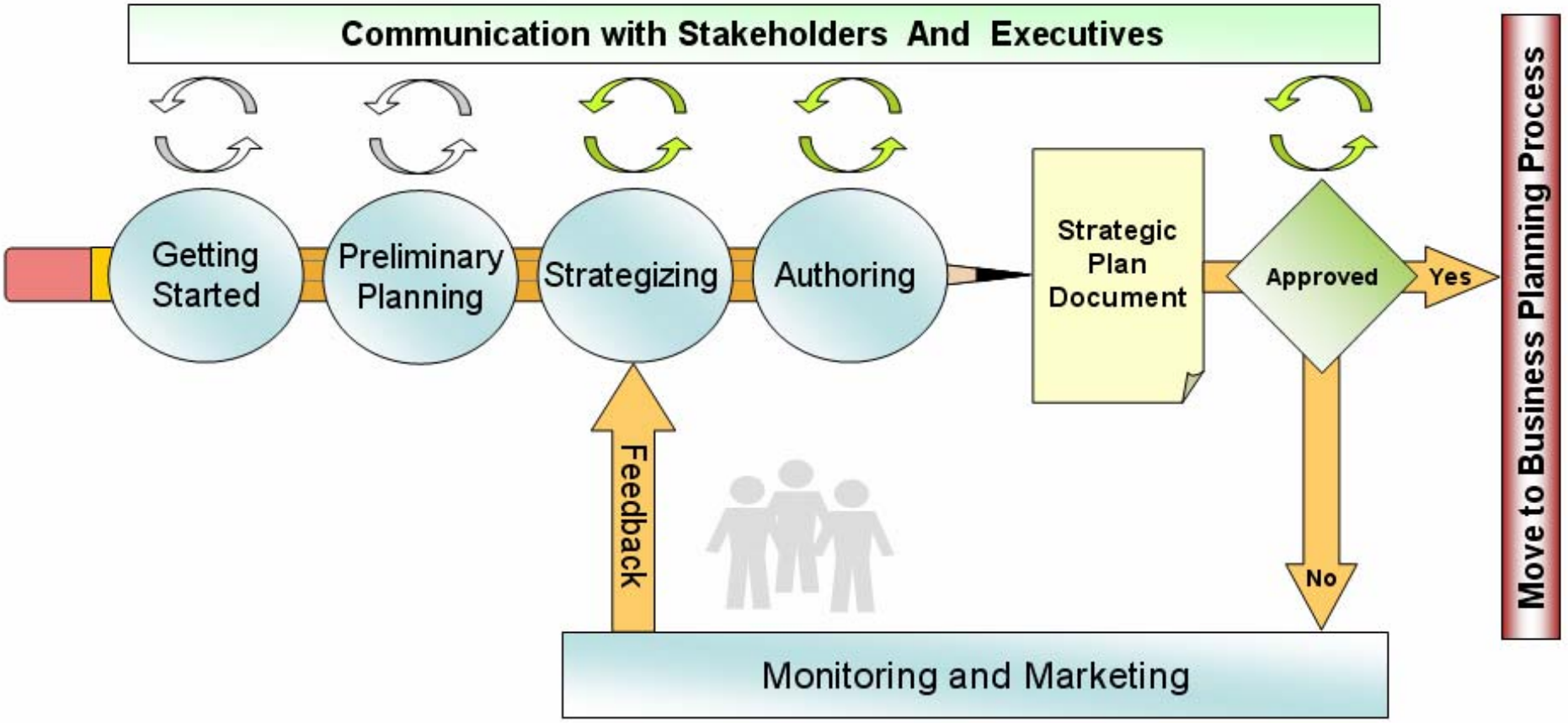
Applying the NSGIC Templates

- Strategic and Business Plans are ‘living’ documents (i.e., planning is a process, and plans should evolve to account for changing conditions)

- Case studies of actual experiences can help make the business case (especially if quantifiable, but also if they tell a meaningful story)

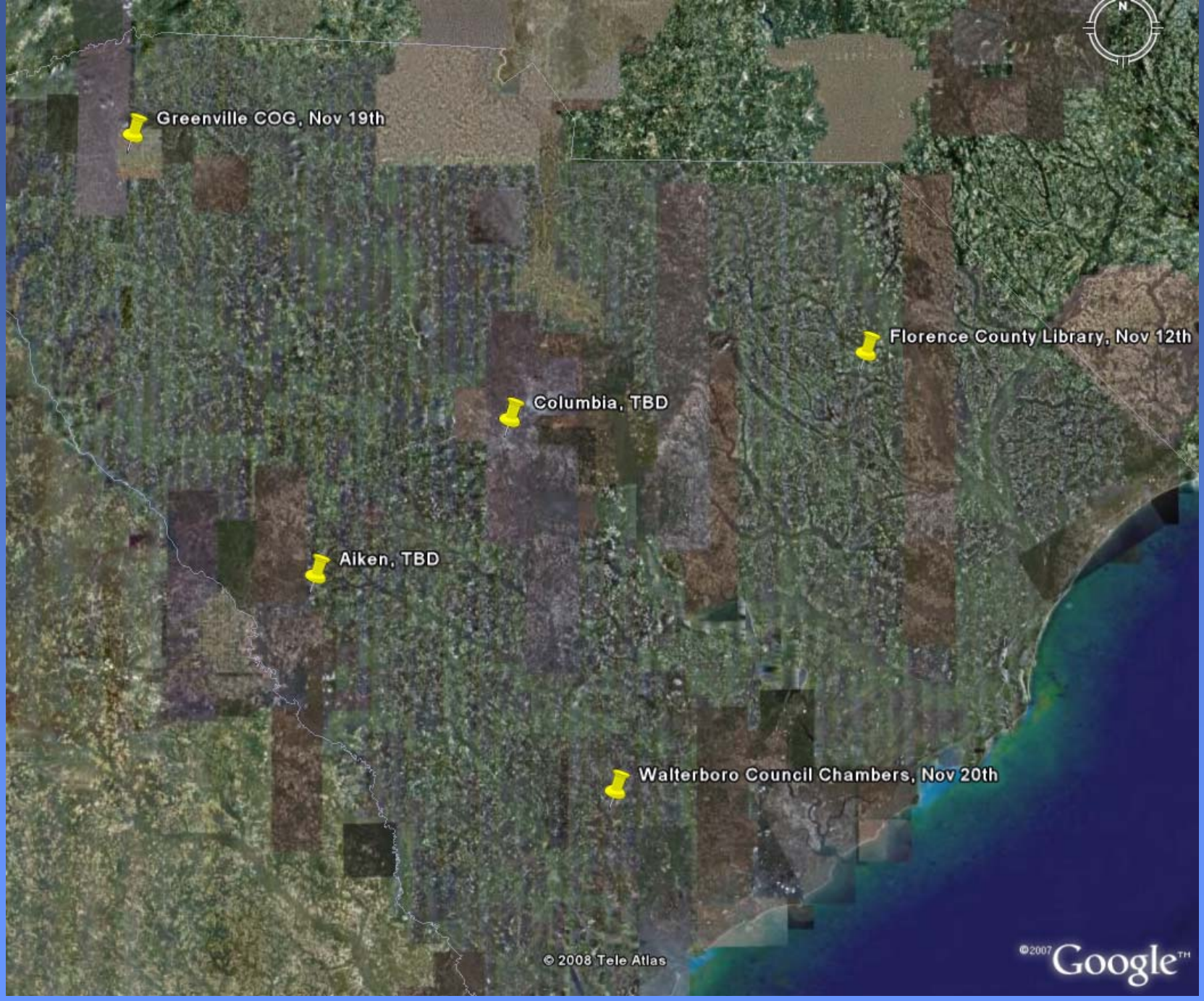
Strategic Planning Process

NSGIC Strategic Planning Process Map



SC GIS State Outreach:
Project Overview

- Kickoff Communication & Coordination
- Regional Workshop Planning Meeting
- Several One-On-One Interviews
- On-line Survey Questionnaire
- Five (5) Regional Stakeholder Meetings
- Preliminary Findings & Recommendations
- Ongoing, Iterative Interaction with SC GIS
- Development of a Strategic Plan


Greenville COG, Nov 19th
Florence County Library, Nov 12th
Columbia, TBD
Aiken, TBD
Walterboro Council Chambers, Nov 20th
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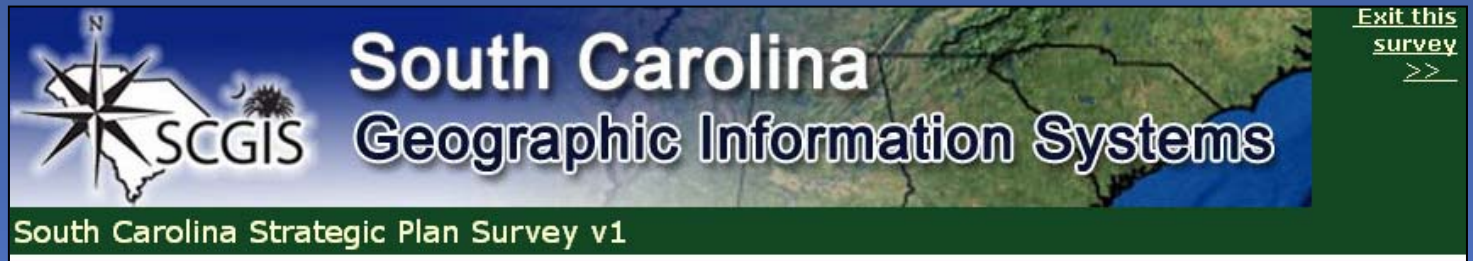
SC GIS State Outreach Survey



Exit this survey >>

South Carolina Strategic Plan Survey v1

Thank you in advance for taking the time to complete this brief survey on GIS activity in South Carolina as part of the statewide GIS Strategic Planning project.

This brief, survey is designed to take approximately 20 minutes of your time. Please answer the questions below using your best judgment and the information that you have available. None of the questions are mandatory so you can skip questions that aren't relevant or that you aren't comfortable answering. Please use the last question to let us know if you have any suggestions for improving GIS in South Carolina, or for improving this survey.

Once again, thank you for your participation in the statewide GIS strategic planning process.

1. Please, tell us about yourself.

Name:
Organization:
Title:
Address:
City/Town/Region:
State/Province: – select state –
ZIP/Postal Code:

2. Which category best describes your organization?

- Municipality pop: <1,000
- Municipality pop: 1,000-10,000
- Regional Planning Organization
- Tribal

appgeo.com

Roles & Responsibilities

- **AppGeo: Facilitator & Scribe**
  - Facilitate planning process
  - To keep the ball rolling
  - Lend our experience
  - Author the documents
- **SC Strategic Plan Project Team: Direction & Ideas**
  - It's ***your plan***
  - Identify issues and priorities
  - Identify the target audience

B R E A K

What are other CAP Grant recipients doing?
Priorities vary from State-to-State

- Develop and Sustain Maintenance of 'Statewide' Data Layers
  - **The Massachusetts , Kansas, and New York plans are focused on** key data layers **and** data infrastructure for sharing, e.g.:
    - **Orthos**
    - **Parcels**
    - **Elevation**
    - **Addresses**
    - **Critical infrastructure**

What are other CAP Grant recipients doing?
Priorities vary from State-to-State

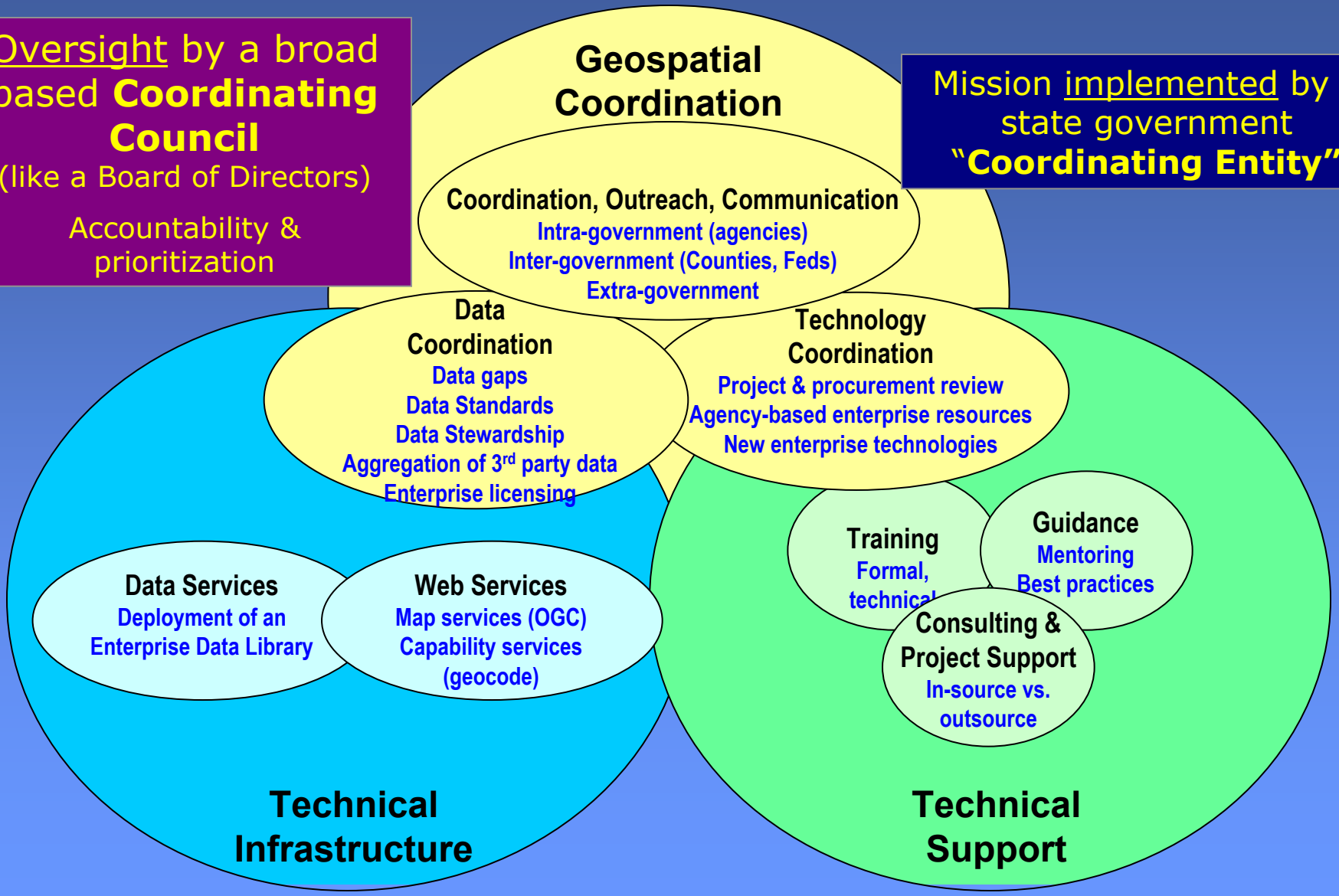
- Improve GIS Governance
  - The **New Hampshire, Wyoming, Connecticut, and Colorado** plans are centered on the creation of a Geospatial Information Officer (GIO) role and a GIS Office, **Pennsylvania** is focused on establishing a true Statewide Council
- Capitalize on New Technology
  - The **Rhode Island and Utah** efforts are focused on building a multi-departmental enterprise architecture with data warehousing and web services

Minnesota's Emerging Model for GIS Coordination

Oversight by a broad based **Coordinating Council**
(like a Board of Directors)

Accountability & prioritization

Mission implemented by a state government "**Coordinating Entity**"



Lessons-Learned in Other States
On GIS Strategic and Business Planning Efforts

- Identify the **high-visibility issues** where GIS coordination activities can have a positive impact (e.g., Smart Growth, Public Safety, and Education, to name a few)
  - What resonates in South Carolina?
- Do not underestimate the importance of **high-level support** and input **early in the process** (i.e., business/departmental sponsor and political/legislative sponsor)
  - Who are the champions in SC?

Lessons-Learned in Other States

On GIS Strategic and Business Planning Efforts

- When states with a mature GIS operation engage in strategic planning it is less about "discovering" what is required and it is more about "articulating" the requirement and **building a consensus** for an approach or solution
- Creating an **intergovernmental Strategic Planning Committee** to oversee the process and take ownership of the plan can be helpful in demonstrating consensus
    - This may help in South Carolina, to avoid a state agency-centric approach

What might the future look like in SC?

- Will there be a Statewide Spatial Data Infrastructure (SSDI) for:
  - Keeping data current (i.e. data maintenance)?
  - Removing barriers to data sharing?
  - Identifying priorities for investment and obtaining sustainable funding?
- Is there a common "vision" to achieve an SSDI?
- Do you need one (and if so what is it)?

Content for Regional Stakeholder Meetings

- **What message to convey?**
  - Some education on project context and SSDI/NSDI
  - Is there a “vision that can be shared”?
- **What issues to present?**
  - Data licensing?
  - Government-to-government data sharing?
- **Survey Results (Compiled as we go)**

What questions to ask regional stakeholders?

- Feedback on the status quo
  - Strengths?
  - Weaknesses?
- Seek concurrence and prioritization of a slate of initiatives
  - Data Sharing Agreements?
  - Data Acquisition Agreements?
- What improvements are needed?
- What are the barriers to success?

Remember:
The process is as important as the plan!

Thank you

Rich Grady

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